

# A Natural EDUCATION Growing Bay Grasses

By Mark Lewandowski

Every summer, people all over Maryland take part in tree plantings, stream clean-ups and other projects to improve the health of the Chesapeake Bay. But for the students and teachers in the Bay Grasses in Classes program, winter is their busiest time of year. In schools across the watershed, January marks the beginning of the indoor growing season of bay grasses.



## What are bay grasses?

Bay grasses, or submerged aquatic vegetation (SAV), are plants that live and grow beneath the water's surface. They do not look like the plants we see on land. The stems and leaves do not have firm branches because the water around the plants provides its support. The leaves are very thin, and have air spaces between the cells to provide buoyancy in the water. If you have ever been in shallow areas of the Bay in the summer, chances are you have seen bay grasses.

Here are a few of the bay grasses you might find in Maryland:

- [Wild celery -- Found in freshwater areas](#)
- [Sago Pondweed -- Found in brackish water \(mixture of fresh and salt water\)](#)
- [Eelgrass – Saltwater species found in the Chesapeake Bay and Coastal Bays](#)

## Why are bay grasses important?

Bay grasses, just like land-based plants, give off oxygen that all aquatic creatures need to survive. They are a food source for ducks and geese, and they provide habitat for crabs, fish, and smaller organisms. Blue crabs use the grasses to hide from predators when they molt, or shed their old shell. Bay grasses also protect the shoreline from waves that cause erosion. In addition, they help keep the water clear and absorb harmful chemicals.

## What can I do to help?

The Bay Grasses in Classes program is a partnership of the Maryland Department of Natural Resources (DNR) and the Chesapeake Bay Foundation (CBF). Each year, DNR and CBF staff provide students with seeds, equipment, curriculum and training necessary to grow bay grasses right in their classrooms. The goals of the program are to restore native populations of bay grasses and to educate students about the key role bay grasses play in the ecology of the Chesapeake Bay.

Students follow step-by-step instructions to assemble their aquariums, mix the soil and



sand and plant their seeds. Next they learn how to test the water quality and measure plant height each week. Data compiled by each class is combined with the data from all of the schools in the program each week. Students can visit the Internet and download graphs that show the different growth rates from each experiment. They can also look at their schools' data and compare their results with those from the rest of the schools.

In May and June, after months of hard work and careful monitoring, the students and teachers take field trips to plant their classroom-raised bay grasses into local tributaries and reservoirs. To better understand their environment, they also take part in activities like nature hikes, fishing, collecting and analyzing aquatic organisms, and canoeing.

The bay grasses planted by the students last season did very well. At Piney Run, a reservoir in Carroll County, the grasses even started to produce seedpods. At Rocky Point, a tributary of the Back River, bay grass beds planted every year since 1999 continue to thrive, and some of the plants have grown to be three and four feet tall!

Students who participate in the Bay Grasses in Classes program are really making a difference. As the largest student-based restoration project in the state of Maryland, the benefits of the program are far reaching. In addition to planting thousands of bay grasses throughout the watershed, students are also instilled with a sense of stewardship towards the Chesapeake Bay.

Funding for the Bay Grasses in Classes program comes from the Chesapeake Bay Trust, National Oceanic and Atmospheric Administration, and the Environmental Protection Agency.

## Explore!

You can learn more about Maryland's bay grasses by visiting the following website:  
[www.dnr.state.md.us/bay/sav/grass\\_info.html](http://www.dnr.state.md.us/bay/sav/grass_info.html)

## Join In!

Want to sign up your school for the Bay Grasses in Classes program? Check out:  
[http://mddnr.chesapeakebay.net/bgic/bgic\\_form.cfm](http://mddnr.chesapeakebay.net/bgic/bgic_form.cfm)

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